

Interpolymer offers  
several suggested formulations for  
Syntran<sup>®</sup> PC 5205.

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- Color Retaining Conditioning Shampoo F-18-73
- Leave-In Conditioner with Color Protection F-18-78

## COLOR RETAINING CONDITIONING SHAMPOO

### Formulation F-18-73-01.205

This mild "sulfate-free" conditioning shampoo with rich, luxurious lather not only gently cleanses "fragile" chemically processed hair but protects the hair from color "wash-out". Unique combination of Olefin/Graft and Conditioning polymers create a complex on the hair surface to lock color and shine into the hair. Keep that first day color longer. Extend the time between color treatments.

	<u>INCI Designation</u>	<u>Weight %</u>
<b>Phase A</b>		
Distilled Water	Water	46.20
Dissolvine Na2S (Akzo Nobel)	Disodium EDTA	0.10
Glycerin, USP, 99.7%	Glycerin	1.00
Stepan Mild LSB (Stephanl)	Sodium Lauryl Sulfoacetate, Disodium Laureth Sulfosuccinate	30.00
Lexaine C (Inolex)	Cocamidopropyl Betaine	12.00
Tauranol I-78 C (Finetex)	Sodium Cocoyl Isethionate	3.00
Mackamide CMA (McIntyre)	Cocamide MEA	1.00
Crothix (Croda)	PEG-150 Pentaerythrityl Tetrastearate	0.05
Incroquat 18 MEA 40 (Croda)	Quaternium-33, Dipropylene Glycol	0.50
Glycol Stearate (Choice)	Glycol Stearate	0.50
<b>Phase B</b>		
<b>Syntran PC 5205</b>	<b>Polyacrylate-15 (and) Polyacrylate-17</b>	3.00
<b>Syntran PC 5320</b>	<b>Polyquaternium-37</b>	1.25
Ritapan D,L (RITA)	Panthenol	0.50
<b>Phase C</b>		
Germall Plus (ISP)	Diazolidinyl Urea, IPBC	0.35
Fragrance	Fragrance	0.30
Trolamine 99%, N.F. (Dow)	Triethanolamine	0.25
	<b>YIELD:</b>	<b>100.00</b>

### Procedure

Heat Phase A ingredients to 75-80°C with moderate agitation. Stir at 75-80°C until homogenous. Cool slowly with moderate agitation to avoid aeration to 55°C. At 55°C, individually add each Phase B ingredient to main batch with continuous agitation until a homogenous mixture is obtained. Cool slowly with moderate agitation to avoid aeration to 40-45°C, individually add Phase C ingredients to batch, stir between each addition until homogenous. Adjust pH of batch between 6.0-6.2.

## LEAVE-IN CONDITIONER WITH COLOR PROTECTION

### Formulation F-18-78

Excellent detangling and softening power on hair combined with color retention properties. Great for all hair types. Superior color protection against color wash-out and UV rays.

	<u>INCI Designation</u>	<u>Weight %</u>
<b>Phase A</b>		
Distilled Water	Water	87.18
Dissolvine Na2S (Akzo Nobel)	Disodium EDTA	0.05
Propylene Glycol	Propylene Glycol	1.50
Ritapan DL (Rita)	Panthenol	0.30
<b>SYNTRAN 5320</b>	<b>Polyquaternium-37</b>	3.00
Protaquat CT-29 (Protamcen)	Cetrimonium Chloride	1.50
Crodasorb UV-HPP (Croda)	Polyquaternium-59, Butylene Glycol	0.50
<b>Phase B</b>		
Mackstat DM (McIntyre)	DMDM Hydantoin	0.40
Promois Silk 1000Q (Rita)	Hydroxypropyltrimonium Hydrolyzed Silk	0.10
Promois S-720 (Rita)	Hydrolyzed Silk	0.05
<b>Phase C</b>		
Brij 98 Veg (Uniquema)	Oleth-20	0.35
Fragrance	Fragrance	0.07
<b>Phase D</b>		
<b>SYNTRAN PC 5205</b>	<b>Polyacrylate-15 (and) Polyacrylate-17</b>	5.00
Citric Acid	Citric Acid	Adjust to pH 4.5-5.5
	<b>YIELD:</b>	<b>100.00</b>

### Procedure

Heat water to 40°C. Individually, add Phase A ingredients. Stir between each addition until homogenous. Add Phase B ingredients. Melt Phase C ingredients at 45°C, add to Phase A/B, stir until homogenous. Add Phase D ingredients. Adjust pH with Citric Acid to 4.5 – 5.5.

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